

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Cancel claims 1-16.

17. An absolute measuring system for determining angles or paths, comprising:

a main voltage supply;

an encoder receiving during normal operation a voltage supply from said main voltage supply, said encoder being switched to an auxiliary mode and receiving an auxiliary voltage and uses less energy when said main voltage supply fails, said encoder only determining a coarse determination of a measured value made during the auxiliary mode of operation; and

a chargeable memory connected to said encoder for providing the auxiliary voltage.

18. The measuring system according to claim 17, wherein said chargeable memory is a battery.

19. The measuring system according to claim 17, wherein said chargeable memory is a chargeable condenser.

20. The measuring system according to claim 17, wherein said chargeable memory contains a chargeable battery and a chargeable condenser.

21. The measuring system according to claim 17, wherein said chargeable memory contains a chargeable condenser and a non-chargeable battery.

22. The measuring system according to claim 17, wherein said chargeable memory is disposed at least in a vicinity of said encoder.

23. The measuring system according to claim 22, wherein said chargeable memory is disposed in said encoder.

24. The measuring system according to claim 22, further comprising a connector coupled to said encoder, said chargeable memory disposed on an encoder side of said connector.

25. The measuring system according to claim 17, wherein said chargeable memory is charged by solar cells.

26. The measuring system according to claim 17, wherein said chargeable memory is charged by electromagnetic waves.

27. The measuring system according to claim 17, wherein said chargeable memory is charged by transformer coupling.

28. The measuring system according to claim 17, wherein said chargeable memory is charged by a motion induced field induction.

29. The measuring system according to claim 17, further comprising:

an external auxiliary power supply; and

cables connecting said external auxiliary power supply and said main voltage supply to said chargeable memory, said chargeable memory being charged by at least one of said main voltage supply and said external auxiliary power supply.

30. The measuring system according to claim 29, wherein said cables are fiber optic cables at least on a side close to said encoder.

31. The measuring system according to claim 17, further

comprising:

a system controller; and

a transmitter/receiver transferring signals between said encoder and said system controller via radio waves.

32. The measuring system according to claim 31, wherein said transmitter/receiver reduces radio transmissions during battery operation when the voltage supply fails.